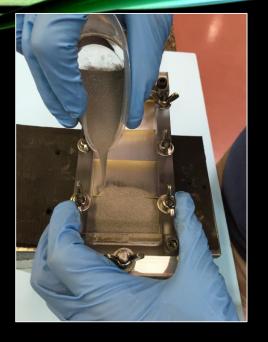
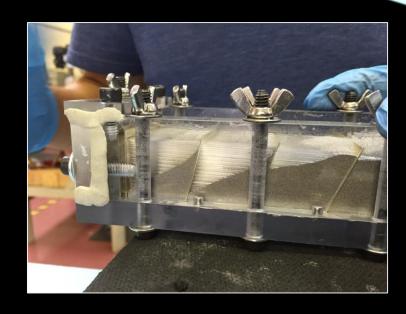
EMCAL MODULE PRODUCTION UPDATE

Sean Stoll 6/8/2015









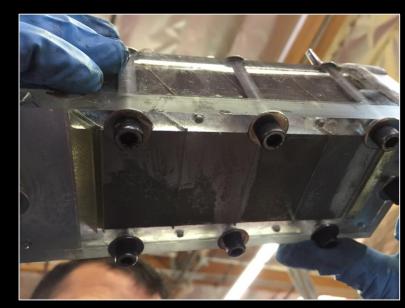


Photos from THP's module production





Photos from THP's module production





THPP as of thurs 6/4:

- created the module successfully
- poured a new module thurs in order to prove the process.
- plan is to machine the new module friday.

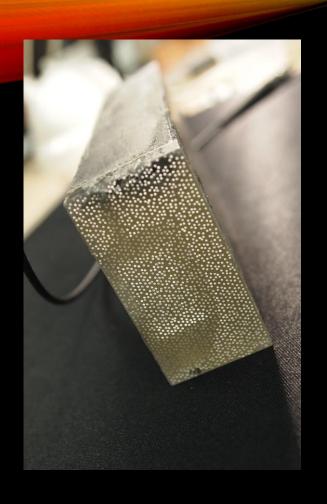


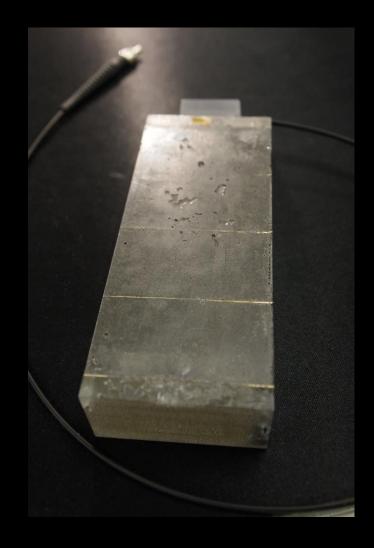
We have produced 5 modules at BNL so far, but have slowed the production of 1-D projective modules.

Still some issues with

- bubbles/vacancies
- surface finish
- fiber position uniformity?







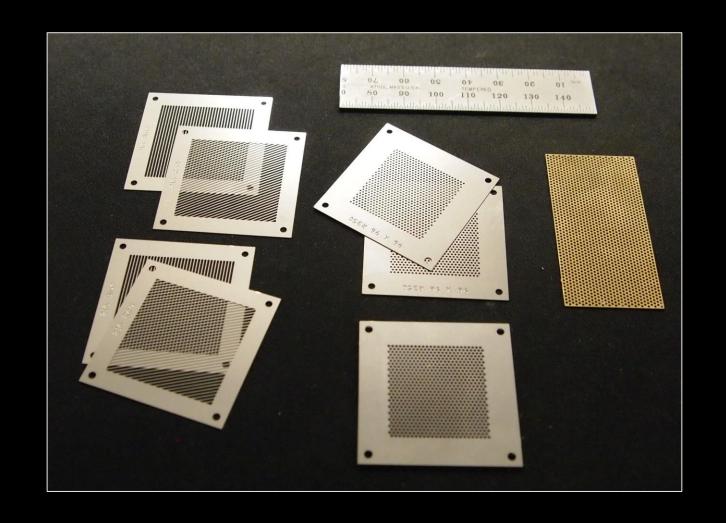


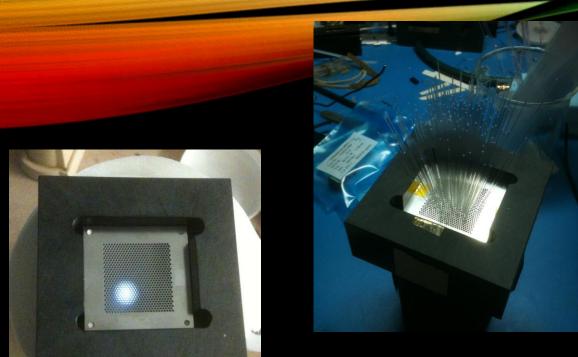
We have started testing concepts for a calibration/monitoring system. Here a laser was used to excite a piece of plastic scintillator, distributing light to the back end of the module.

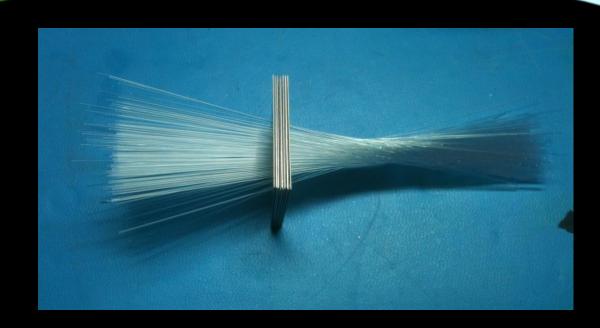
At BNL:

We have received all of the screens and wire frames for 2-D projective module production.

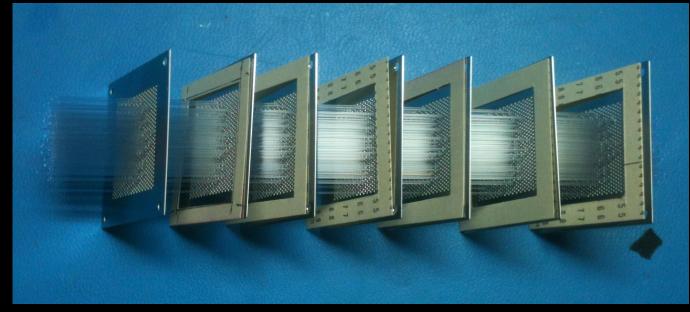
We are working on designing the fixtures and molds to hold the screens during the process.







Started working with stepped screens with shims between screens to allow fibers to pass through. Thickness of shims needs to be optimized but the process seems feasible. This could plug into the existing process but does not address other process efficiency issues.



This stack of 7 screens (1.00, 0.99, 0.98, 0.96, 0.94, 0.92, 0.90) was manually filled, but demonstrates that the fibers can be fitted through the stack of screens all the way out to the corners.

